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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,965	12/09/2003	Hsin-Ho Wu	NSC1P287/P05765	6419

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EXAMINER

FLORES RUIZ, DELMA R

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/731,965	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Delma R. Flores Ruiz	<b>Art Unit</b> 2828	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 5/15/2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21, 27, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 22 - 26, 28 - 29, and 32 - 34 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1 – 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 5 are indefinite and not clear, the recitation “population of lasers” is indefinite since one of ordinary skill in the art would not understand what applicant means by “population” since the term does not define quantity. For example population does not define a group of objects. If applicant intends to say groups of at least 2 lasers, the claimed language does not reflect said limitation. Population, according to the “Webster’s New Dictionary of the English Language” the term population is defined as: the people or number of people in an area; the organism inhabiting a particular locality; a group of individuals from which samples are taken for statistical measurements. Therefore since a laser is not considered to be a person, organism or individual for statistical measurement, the term “population” is considered indefinite.

Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 5 are indefinite and not clear because it has been held that the recitation that an element is "capable of" performing a function is not positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20, 21, 27, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ames (5,073,838) in view of Levinson (5,019,769).

***Regarding claims 20, 27 and 31***, Ames discloses in Figure 2 a semiconductor laser emitter (see Fig. 2, Character 10); a monitor element (see Fig. 2, Character 22) for measuring the optical power produced by the semiconductor laser emitter; temperature

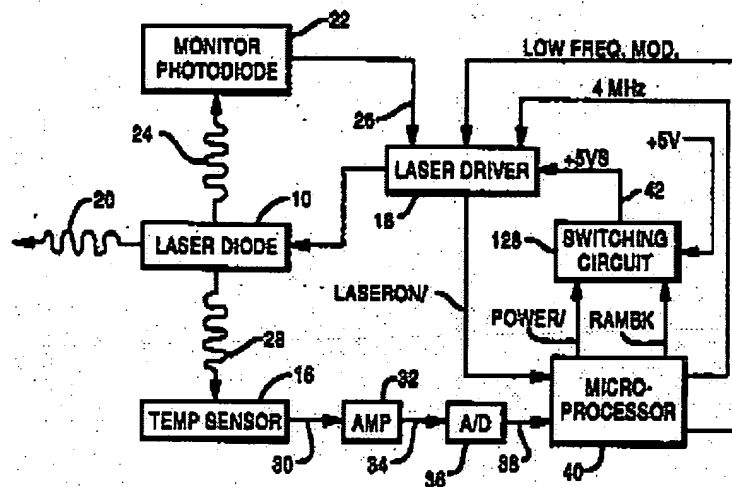
sensor (see Fig. 2, Character 16) for detecting the temperature of the semiconductor laser emitter and producing an sensor output signal associated with the detected temperature; memory (see Fig. 2 Character 40) including a look-up table (abstract) for having stored values for current information associated with temperature; and laser driver circuitry (see Fig. 2, Character 18) for receiving temperature dependent current information from the table and using said current information to provide a driving current to the semiconductor laser emitter so that the laser emits an optical signal having a desired optical power.

Ames discloses the claimed invention except for fiber optic link. However, it is well know in the art to apply the fiber optic link as discloses by Levinson in Column 7 Lines 9 – 12. Therefore, it would have been obvious to a person having ordinary skill in the art to apply the well know fiber optic link as suggested by Levinson to the laser of Ames, because it will could be used of standard construction and the light transmitted by the optical fiber link is converted into a electrical signal, and transmitting information see Figure 1, Character 222 and Column 7, Lines 9 – 12 of Levinson.

**Regarding claim 21**, Ames discloses in Figure 2 memory (see Fig. 2 Character 40) has stored therein values concerning a relationship between temperature and target average power. The target average power is not explicitly disclosed. However, it was shown above that Ames and Levinson teach memory for store different values e.g.

temperature values. Due to the use of these memory, it is inherent that target average power has stored in the memory.

Levinson shown Figure 2



**Regarding claim 30,** Ames discloses in figure 2 a semiconductor laser emitter (see Fig. 2, Character 10); a monitor element (see Fig. 2, Character 22) for measuring the optical power produced by the semiconductor laser emitter; temperature sensor (see Fig. 2, Character 16) for detecting the temperature of the semiconductor laser emitter and producing an sensor output signal associated with the detected temperature; memory (see Fig. 2 Character 40) capable of storing information in a table (abstract) wherein the information includes at least on of the following: value concerning relationships between temperature and selected current information associated with the operation of the laser (Column 3, Lines 60 – 67 and Column 4, Lines 1 – 38), and values concerning relationships between temperature and target average power

associated with the operation of the laser (The target average power is not explicitly disclosed. However, it was shown above that Ames and Levinson teach memory for store different values e.g. temperature values. Due to the use of these memory, it is inherent that target average power has stored in the memory); and laser driver circuitry (see Fig. 2, Character 18) for receiving temperature dependent current information from the table and using said current information to provide a driving current to the semiconductor laser emitter so that the laser emits an optical signal having a desired optical power.

Ames discloses the claimed invention except for fiber optic link. However, it is well known in the art to apply the fiber optic link as disclosed by Levinson in Column 7 Lines 9 – 12. Therefore, it would have been obvious to a person having ordinary skill in the art to apply the well known fiber optic link as suggested by Levinson to the laser of Ames, because it will could be used of standard construction and the light transmitted by the optical fiber link is converted into an electrical signal, and transmitting information see Figure 1, Character 222 and Column 7, Lines 9 – 12 of Levinson.

### ***Allowable Subject Matter***

Claims 22 – 26, 28 – 29, 32 – 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all

of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1 - 34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Sun Harvey can be reached on (571) -272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Delma R. Flores Ruiz  
Examiner  
Art Unit 2828



Min Sun Harvey  
Supervisor Patent Examiner  
Art Unit 2828

DRFR/MH  
August 2, 2006